



NEC3 Term Service Contract (TSC3)

Between **ESKOM HOLDINGS SOC Ltd**
(Reg No. 2002/015527/30)

and

for **Supply, Inspect, fabricate, replace, and install ceramic lined PF pipework, square to round, hangers and supports structures) on an "as-and-when" required basis at Kriel Power Station for a period of five (5) years**

Contents:

Part C1 Agreements & Contract Data

Part C2 Pricing Data

Part C3 Scope of Work

CONTRACT No.

PART C1: AGREEMENTS & CONTRACT DATA

Contents:

C1.1 Form of Offer and Acceptance

[to be inserted from Returnable Documents at award stage]

C1.2a Contract Data provided by the *Employer*

C1.2b Contract Data provided by the *Contractor*

[to be inserted from Returnable Documents at award stage]

C1.3 Proforma Guarantees

C1.1 Form of Offer & Acceptance

Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of:

Supply, Inspect, fabricate, replace, and install ceramic lined PF pipework, square to round, hangers and supports structures) on an "as-and-when" required basis at Kriel Power Station for a period of five (5) years

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the *Contractor* under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the *conditions of contract* identified in the Contract Data.

Options A	The offered total of the Prices exclusive of VAT is	
	Value Added Tax @ 15% is	
	The offered total of the amount due inclusive of VAT is ¹	

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the *Contractor* in the *conditions of contract* identified in the Contract Data.

Signature(s)

Name(s)

Capacity

For the tenderer:

(Insert name and address of organisation)

Name & signature of witness

Date

Tenderer's CIDB registration number:

¹ This total is required by the *Employer* for budgeting purposes only. Actual amounts due will be assessed in terms of the *conditions of contract*.

Acceptance

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

- Part C1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
- Part C2 Pricing Data
- Part C3 Scope of Work: Service Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed and signed original copy of this document, including the Schedule of Deviations (if any).

Signature(s)

Name(s)
Capacity

for the
Employer

(Insert name and address of organisation)

Name &
signature of
witness

Date

Note: If a tenderer wishes to submit alternative tenders, use another copy of this Form of Offer and Acceptance.

Schedule of Deviations to be completed by the *Employer* prior to contract award

Note:

1. This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.
2. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
3. A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

No.	Subject	Details
1	[•]	[•]
2	[•]	[•]
3	[•]	[•]
4	[•]	[•]
5	[•]	[•]
6	[•]	[•]
7	[•]	[•]

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the tenderer:

Signature

Name

Capacity

On behalf
of
Name &
signature
of witness

Date

For the Employer

(Insert name and address of organisation)

(Insert name and address of organisation)

C1.2 TSC3 Contract Data

Part one - Data provided by the *Employer*

Completion of this data in full, according to the Options chosen, is essential to create a complete contract.

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option:	
	dispute resolution Option and secondary Options	<p>A: Priced contract with price list</p> <p>W1: Dispute resolution procedure</p>
		<p>X1: Price adjustment for inflation</p> <p>X2: Changes in the law</p>
		<p>X17: Low service damages</p> <p>X18: Limitation of liability</p>
		<p>X19: Task Order</p> <p>Z: Additional conditions of contract</p>
	of the NEC3 Term Service Contract April 2013 ² (TSC3)	
10.1	The <i>Employer</i> is (name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa V Tshamano
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
	Tel No.	017 615 2300
	Fax No.	-
10.1	The <i>Service Manager</i> is (name):	S. Maboza
	Address	Kriel Power Station Private Bag X5009, Kriel 2271
	Tel	013 295 9042
	Fax	

² Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 539 1902 www.ecs.co.za

e-mail

mabozasn@eskom.co.za

11.2(2)	The Affected Property is	All plants areas at Kriel Power Station
11.2(13)	The service is	Supply, Inspect, fabricate, replace and install ceramic lined PF pipework, square to round, hangers and supports structures) on an "as-and-when" required basis at Kriel Power Station for a period of five (5) years
11.2(14)	The following matters will be included in the Risk Register	<ul style="list-style-type: none"> - Outage movement - Late fabrication due to late order placement
11.2(15)	The Service Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period for reply</i> is	<ul style="list-style-type: none"> - Within 2 working days non outage periods - During Outages within 12 hours including weekends and public holidays - 24 Hours For Maintenance Work
2	The Contractor's main responsibilities	Data required by this section of the core clauses is also provided by the Contractor in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data
21.1	The <i>Contractor</i> submits a first plan for acceptance within	Level 3 plan within a week of the Contract Date
3	Time	
30.1	The proposed <i>starting date</i> is.	01 October
30.1	The <i>service period</i> is	5 Years
4	Testing and defects	As per section X18 and section 4.3.2
5	Payment	
50.1	The <i>assessment interval</i> is	<ul style="list-style-type: none"> - 25th day of each successive month - Service manager may when deemed necessary request Bi-Weekly payment assessments or on the completion of work
51.1	The <i>currency of this contract</i> is the	South African Rand
51.2	The period within which payments are made is	14 days as per Eskom Finance Procedures.
51.4	The <i>interest rate</i> is	<p>the publicly quoted prime rate of interest (calculated on a 365 day year) charged by from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and</p> <p>(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the</p>

6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted *mutatis mutandis* every 6 months thereafter (and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.

6	Compensation events	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data																		
7	Use of Equipment Plant and Materials	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data																		
8	Risks and insurance																			
80.1	These are additional <i>Employer's</i> risks	As per NEC3 TSC Core Clause 8 Risks and Insurance																		
83.1	The <i>Employer</i> provides the insurances stated in the Insurance Table below. The <i>Contractor</i> will be liable for the applicable deductible, if any.	<p style="text-align: center;">INSURANCE TABLE</p> <table border="1"> <thead> <tr> <th>Insurance against</th><th>Minimum amount of cover or minimum limit of indemnity</th></tr> </thead> <tbody> <tr> <td>Assets All Risk</td><td>As per the insurance policy document.</td></tr> <tr> <td>Project insurance</td><td>As per the insurance policy document.</td></tr> <tr> <td>General and Public Liability</td><td>As per the insurance policy document.</td></tr> <tr> <td>Environmental Liability</td><td>As per the insurance policy document.</td></tr> <tr> <td>Transport (Marine)</td><td>As per the insurance policy document.</td></tr> <tr> <td>Motor Fleet and Mobile Plant</td><td>As per the insurance policy document.</td></tr> <tr> <td>Terrorism</td><td>As per the insurance policy document.</td></tr> <tr> <td>Cyber Liability</td><td>As per the insurance policy document.</td></tr> </tbody> </table>	Insurance against	Minimum amount of cover or minimum limit of indemnity	Assets All Risk	As per the insurance policy document.	Project insurance	As per the insurance policy document.	General and Public Liability	As per the insurance policy document.	Environmental Liability	As per the insurance policy document.	Transport (Marine)	As per the insurance policy document.	Motor Fleet and Mobile Plant	As per the insurance policy document.	Terrorism	As per the insurance policy document.	Cyber Liability	As per the insurance policy document.
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83.1	The <i>Contractor</i> provides the insurances stated in the Insurance Table: The insurances provide cover for events which are at the <i>Contractor's</i> risk from the <i>starting date</i> until the end of the <i>service period</i> or a termination certificate has been issued																			

INSURANCE TABLE

Insurance against	Minimum amount of cover or minimum limit of indemnity
Loss of or damage caused by the <i>Contractor</i> to the <i>Employer's</i> property	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy Deductible where covered by the <i>Employer's</i> insurance.
Loss of or damage to Plant and Materials	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy Deductible where covered by the <i>Employer's</i> insurance.
Loss of or damage to Equipment	The replacement cost where not covered by the <i>Employer's</i> insurance. The <i>Employer's</i> policy Deductible where covered by the <i>Employer's</i> insurance.
The <i>Contractor's</i> liability for loss of or damage to property (except the <i>Employer's</i> property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) arising from or in connection with the <i>Contractor's</i> Providing the Service	<u>Loss of or damage to property</u> The replacement cost <u>Bodily injury to or death of a person</u> The amount required by the applicable law.
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law

9	Termination	Termination will be dealt with as per NEC 3 TSC termination clauses			
10	Data for main Option clause				
A	Priced contract with price list				
20.5	The Contractor prepares forecasts of the final total of the Prices for the whole of the Task Order at intervals no longer than	2 weeks.			
11	Data for Option W1				
W1.1	The <i>Adjudicator</i>	the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).			
W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the Institution of Civil Engineers (London) (see www.ice-sa.org.za) or its successor body.			
W1.4(2)	The <i>tribunal</i> is:	Arbitration			
W1.4(5)	<p>The <i>arbitration procedure</i> is</p> <p>The place where arbitration is to be held is</p> <p>The person or organisation who will choose an arbitrator</p> <ul style="list-style-type: none"> - if the Parties cannot agree a choice or - if the arbitration procedure does not state who selects an arbitrator, is 	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body. Johannesburg South Africa the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.			
12	Data for secondary Option clauses				
X1	Price adjustment for inflation	Tenderer to complete			
X1.1	<p>The <i>base date</i> for indices is</p> <p>The proportions used to calculate the Price Adjustment Factor are:</p>	<table border="1"> <tr> <td>proportion</td> <td>linked to index for</td> <td>Index prepared by</td> </tr> </table>	proportion	linked to index for	Index prepared by
proportion	linked to index for	Index prepared by			

15

non-adjustable

100

X2	Changes in the law	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
X17	Low service damages	
X17.1	The service level table is in	Annexure B
X18	Limitation of liability	
X18.1	The Contractor's liability to the Employer for indirect or consequential loss is limited to	R0.0 (zero Rand)
X18.2	For any one event, the Contractor's liability to the Employer for loss of or damage to the Employer's property is limited to	The amount of the applicable deductibles at contract date.
X18.3	The Contractor's liability for Defects due to his design of an item of Equipment is limited to	The greater of the total of the Prices at the Contract Date and the amounts excluded and unrecoverable from the Employer's insurance (other than the resulting physical damage to the Employer's property which is not excluded) plus the applicable deductibles at contract date.
X18.5	The end of liability date is	30 days
X19	Task Order	
X19.5	The Contractor submits a Task Order programme to the Service Manager within	<ul style="list-style-type: none"> - 5 days of receiving the Task Order - Additional Emergency Conditions Apply
Z	The additional conditions of contract are	Z1 to Z12 always apply.

Z1 Cession delegation and assignment

- Z1.1 The Contractor does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the Employer.
- Z1.2 Notwithstanding the above, the Employer may on written notice to the Contractor cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

Z2 Joint ventures

- Z2.1 If the Contractor constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the Employer for the performance of this contract.
- Z2.2 Unless already notified to the Employer, the persons or organisations notify the Service Manager within two weeks of the Contract Date of the key person who has the authority to bind the Contractor on their behalf.

Z2.3 The *Contractor* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Contractor* in writing.

Z3 Change of Broad Based Black Economic Empowerment (B-BBEE) status

Z3.1 Where a change in the *Contractor*'s legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor*'s B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.

Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Service Manager* within thirty days of the notification or as otherwise instructed by the *Service Manager*.

Z3.3 Where, as a result, the *Contractor*'s B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor*'s obligation to Provide the Service.

Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P4 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z4 Confidentiality

Z4.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.

Z4.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Service Manager*.

Z4.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.

Z4.4 The taking of images (whether photographs, video footage or otherwise) of the Affected Property or any portion thereof, in the course of Providing the Service and after the end of the *service period*, requires the prior written consent of the *Service Manager*. All rights in and to all such images vests exclusively in the *Employer*.

Z4.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z5 Waiver and estoppel: Add to core clause 12.3:

Z5.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Service Manager* or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z6 Health, safety and the environment: Add to core clause 27.4

Z6.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the service. Without limitation the *Contractor*:

- accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Affected Property;
- warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of the service; and
- undertakes, in and about the execution of the service, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor*'s direction and control, likewise observe and comply with the foregoing.

Z6.2 The *Contractor*, in and about the execution of the service, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor*'s direction and control, likewise observe and comply with the foregoing.

Z7 Provision of a Tax Invoice and interest. Add to core clause 51

Z7.1 Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer*'s procedures stated in the Service Information, showing the amount due for payment equal to that stated in the payment certificate.

Z7.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.

Z7.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer*'s VAT number 4740101508 on each invoice he submits for payment.

Z8 Notifying compensation events

Z8.1 Delete the last paragraph of core clause 61.3 and replace with:

If the *Contractor* does not notify a compensation event within eight weeks of becoming aware of the event, he is not entitled to a change in the Prices.

Z9 Employer's limitation of liability

Z9.1 The *Employer*'s liability to the *Contractor* for the *Contractor*'s indirect or consequential loss is limited to R0.00 (zero Rand)

Z9.2 The *Contractor*'s entitlement under the indemnity in 82.1 is provided for in 60.1(12) and the *Employer*'s liability under the indemnity is limited to compensation as provided for in core clause 63 and X19.11 if Option X19 Task Order applies to this contract.

Z10 Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":

Z10.1 or had a business rescue order granted against it.

Z11 Ethics

For the purposes of this Z-clause, the following definitions apply:

Affected Party	means, as the context requires, any party, irrespective of whether it is the <i>Contractor</i> or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,
Coercive Action	means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,
Collusive Action	means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,
Committing Party	means, as the context requires, the <i>Contractor</i> , or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees,
Corrupt Action	means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,
Fraudulent Action	means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,
Obstructive Action	means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action and
Prohibited Action	means any one or more of a Coercive Action, Collusive Action, Corrupt Action, Fraudulent Action or Obstructive Action.

Z 11.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.

Z 11.2 The *Employer* may terminate the *Contractor*'s obligation to Provide the Service if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor*'s obligation to Provide the Service for this reason.

Z 11.3 If the *Employer* terminates the *Contractor*'s obligation to Provide the Service for this reason, the procedures and amounts due on termination are respectively P1, P2, P3 and P4, and A1 and A3.

Z 11.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation.

Z12 Contract Financial Commitments

Z12.1 Task orders will be issued by the *Service Manager* on an "as and when" required basis. The liability of the *Employer* is limited to the total of the Prices stated in the specific Task Order and not the total Price stated in the Service Information. The *Employer* is not obliged to issue any Task Order to the *Contractor* despite the *Contractor* being awarded the contract.

Annexure A: Insurance provided by the Employer

These notes are provided as guidance to tendering contractors and the Contractor about the insurance provided by the Employer..

1. Services provided in a TSC3 contract could include some element of construction or refurbishment as well as a continuous maintenance or operational service activity. If an event occurs which causes loss or damage, a claim could be made either against the *Employer's* "works" type policy which may be in place for the *Employer's* portion of the Affected Property concerned or against the *Employer's* assets policy which may be in place for the *Employer's* portion of the Affected Property concerned, or both.
2. The cover provided and the deductibles under the works policy are different to those under the assets policy. Each policy has a range of applicable deductibles depending on the location of the Affected Property and the nature of the insurable event.
3. Tendering contractors should note that cover provided by the *Employer* is only per the policies available on the internet web link listed below and may not be the cover required by the tendering contractor or as intended by each of the listed insurances in the left hand column of the Insurance Table in clause 83.2. In terms of clause 83.1 "the *Contractor* provides the insurances stated in the Insurance Table except any insurance which the *Employer* is to provide". Hence the *Contractor* provides insurance which the *Employer* does not provide and in cases where the *Employer* does provide insurance the *Contractor* insures for the difference between what the Insurance Table requires and what the *Employer* provides.

Annexure B: Table of low service damages (X17)

- Low Service Damage Description	- Value of Low Service Damages	- Limit of Low Service Damage
<ul style="list-style-type: none"> - Late delivery of spares affecting Outage Critical Path - Causing subcritical to be critical path. 	<ul style="list-style-type: none"> - 1.5% of Task Order per day 	<ul style="list-style-type: none"> - Limited to 10% of the Task Order value
<ul style="list-style-type: none"> - - Service delays not finishing as per agreed upon Programme submitted to the Service Manager 	<ul style="list-style-type: none"> - - 1% of Task Order per day 	<ul style="list-style-type: none"> - - Limited to 10% of the Task Order value
<ul style="list-style-type: none"> - - Submission of documents as per agreed upon CDSS in this <i>service agreement</i> 	<ul style="list-style-type: none"> - - 0.5% of Task Order per day 	<ul style="list-style-type: none"> - - Limited to 10% of the Task Order value
<ul style="list-style-type: none"> - - Rejected spares due to poor workmanship. 	<ul style="list-style-type: none"> - - 2% of Task Order per day 	<ul style="list-style-type: none"> - - Limited to 10% of the Task Order value
<ul style="list-style-type: none"> - - Daily Progress Updated Programme 	<ul style="list-style-type: none"> - - 0.5% of Task Order per day 	<ul style="list-style-type: none"> - - Limited to 10% of Task Order Value
<ul style="list-style-type: none"> - - No response of NCR within 3 days 	<ul style="list-style-type: none"> - - 1% of Task Order per day 	<ul style="list-style-type: none"> - - Limited to 10% of Task Order Value

C1.2 Contract Data

Part two - Data provided by the Contractor

Notes to a tendering contractor:

1. Please read both the both the NEC3 Term Service Contract April 2013 and the relevant parts of its Guidance Notes (TSC3-GN)³ in order to understand the implications of this Data which the tenderer is required to complete.
2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
3. Where a form field like this [] appears, data is required to be inserted relevant to the option selected. Click on the form field **once** and type in the data. Otherwise complete by hand and in ink.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is The <i>subcontracted fee percentage</i> is	
11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information for the <i>Contractor's</i> plan is in:	
21.1	The plan identified in the Contract Data is contained in:	
24.1	The key people are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job Responsibilities: Qualifications:	

³ Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 5391902 or www.ecs.co.za

Experience:

CV's (and further key person's data including CVs) are in.

A	Priced contract with price list
11.2(12)	The <i>price list</i> is in
11.2(19)	The tendered total of the Prices is
C	Target contract with price list
11.2(12)	The <i>price list</i> is in
11.2(20)	The tendered total of the Prices is
E	Cost reimbursable contract
11.2(12)	The <i>price list</i> is in

PART 2: PRICING DATA

TSC3 Option A

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A	2
C2.2	The <i>price list</i>	[•]

C2.1 Pricing assumptions: Option A

How work is priced and assessed for payment

Clause 11 in NEC3 Term Service Contract (TSC3) core clauses and Option A states:

Identified and defined terms	11	
	11.2	(12) The Price List is the <i>price list</i> unless later changed in accordance with this contract.
		(17) The Price for Services Provided to Date is the total of
		<ul style="list-style-type: none"> • the Price for each lump sum item in the Price List which the <i>Contractor</i> has completed and • where a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the <i>Contractor</i> has completed by the rate.
		(19) The Prices are the amounts stated in the Price column of the Price List. Where a quantity is stated for an item in the Price List, the Price is calculated by multiplying the quantity by the rate.

This confirms that Option A is a priced contract where the Prices are derived from a list of items of service which can be priced as lump sums or as expected quantities of service multiplied by a rate or a mix of both.

Function of the Price List

Clause 54.1 in Option A states: “Information in the Price List is not Service Information”. This confirms that instructions to do work or how it is to be done are not included in the Price List but in the Service Information. This is further confirmed by Clause 20.1 which states, “The *Contractor* Provides the Service in accordance with the Service Information”. Hence the *Contractor* does **not** Provide the Service in accordance with the Price List. The Price List is only a pricing document.

Link to the *Contractor*’s plan

Clause 21.4 states “The *Contractor* provides information which shows how each item description on the Price List relates to the operations on each plan which he submits for acceptance”. Hence when compiling the *price list*, the tendering contractor needs to develop his first clause 21.2 plan in such a way that operations shown on it can be priced in the *price list* and result in a satisfactory cash flow in terms of clause 11.2(17).

Preparing the *price list*

Before preparing the *price list*, both the *Employer* and tendering contractors should read the TSC3 Guidance Notes pages 14 and 15. In an Option A contract, either Party may have entered items into the *price list* either as a process of offer and acceptance (tendering) or by negotiation depending on the nature of the service to be provided. Alternatively the *Employer*, in his Instructions to Tenderers or in a Tender Schedule, may have listed some items that he requires the *Contractor* to include in the *price list* to be prepared and priced by him.

It is assumed that in preparing or finalising the *price list* the *Contractor*:

- Has taken account of the guidance given in the TSC3 Guidance Notes relevant to Option A;

- Understands the function of the Price List and how work is priced and paid for;
- Is aware of the need to link operations shown in his plan to items shown in the Price List;
- Has listed and priced items in the *price list* which are inclusive of everything necessary and incidental to Providing the Service in accordance with the Service Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk;
- Has priced work he decides not to show as a separate item within the Prices or rates of other listed items in order to fulfil the obligation to complete the service for the tendered total of the Prices.
- Understands there is no adjustment to items priced as lump sums if the amount, or quantity, of work within that item later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the (lump sum) Prices is as a result of a compensation event.

Format of the *price list*

(From the example given in an Appendix within the TSC3 Guidance Notes)

Entries in the first four columns in the *price list* in section C2.2 are made either by the *Employer* or the tendering contractor.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tendering contractor enters the amount in the Price column only, the Unit, Expected Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for an item of work which is the rate for the work multiplied by the quantity completed, the tendering contractor enters the rate which is then multiplied by the Expected Quantity to produce the Price, which is also entered.

If the *Contractor* is to be paid a Price for an item proportional to the length of time for which a service is provided, a unit of time is stated in the Unit column and the expected length of time (as a quantity of the stated units of time) is stated in the Expected Quantity column.

C2.2 the price list

Item no.	Description	Comment	Unit	Estimated Quantity	Rate [ZAR]	Total Rand Value	Duration Of Repairs [Hours]
100 Preliminary And General							
101	Site Establishment		Sum	1			N/A
102	Safety Related PPE	Per year	Sum	20			N/A
103	Transport	Delivery of spares to Kriel Site	Km	352000			N/A
104	Accommodation(Only 10 people to be accommodated)		Days	660			N/A
105	Tools and Equipment		Sum	20			N/A
106	Consumables		Hours	20			N/A
107	QC Inspector (level 1)		Hours	11520			N/A
108	Workshop Manager		Hours	11520			
109	Workshop Supervisor		Hours	11520			
110	Qualified Safety officer		Hours	11520			N/A
111	Planner/Scheduler		Hours	11520			
112	Draftsman		Hours				
111	Fitter and turners 2 Boiler Makers 2 Welders 2 Riggers 2 Assistants 16		Hours	960000 192000			
Sub Total							
200 PF Piping							

201	Replace PF bend U1-6						
202	Replace PF Pipe straight sections U1-6						
203	Repair PF Bend U1-6						
204	Repair PF Pipe straight sections U1-6						
205	Replace the stainless-steel tip - Unit 1 - 3	Drawing F3E29794	Each				
206	Replace the square to round - Unit 1 - 3	Drawing F3E29794	Each				
207	Replace the small riffle box - Unit 1 - 3		Each				
208	Replace 25% of the liners - Unit 1 - 3	Drawing F3E29794	Each				
209	Replace 50% of the liners - Unit 1 - 3	Drawing F3E29794	Each				
210	Replace 75% of the liners - Unit 1 - 3	Drawing F3E29794	Each				
211	Replace 100% of the liners - Unit 1 - 3	Drawing F3E29794	Each				
212	Replace the stainless-steel tip - Unit 4 - 6	Drawing F3G31663	Each				
213	Replace the square to round - Unit 4 - 6	Drawing F3G31663	Each				
214	Replace the small riffle box - Unit 4 - 6	Drawing F3G31663	Each				
215	Replace 25% of the liners - Unit 4 - 6	Drawing F3G31663	Each				
216	Replace 50% of the liners - Unit 4 - 6	Drawing F3G31663	Each				
217	Replace 75% of the liners - Unit 4 - 6	Drawing F3G31663	Each				
218	Replace 100% of the liners - Unit 4 - 6	Drawing F3G31663	Each				
219	Repair the square to round with a 100 x 100 mm window patch. Unit 1 - 6	Drawing F3E29794 Item 18	Each				
220	Repair the square to round with a 200 x 200 mm window patch. Unit 1 - 6	Drawing F3E29794 Item 18	Each				
221	Repair and calibrate hangers and support U1-6						
222	Replace hangers and supports U1-6						
223	Replace Gaskets U1-6						
224	Bolts and nuts U1-6						
Sub Total							

225	PF liners - on casing inlet	For tendering purposes only: 150 mm x 800 mm x 10 mm, Material: Hardox. Each burner has 15 liners. 540 per unit . 3240 to coverer 6 units. The liner will be cut and profiled to fit over the existing liners in drawings F3G31663, F3E29794 Item 20	Each			
220						
Sub Total						

Section	Description	Sub-Total
100	Preliminary & General	
201	PF Pipes from the distribution boxes	
206,213	PF Burner Square to round	
225	PF Liners	
222	Hangers and Support	
Total Value Excluding VAT & CPA		

PART C3: SCOPE OF WORK

Document reference	Title	No of pages
C3.1	This cover page <i>Employer's Service Information</i>	1 23
	Total number of pages	

C3.1: EMPLOYER'S SERVICE INFORMATION

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CONTRACT TITLE: Supply, Inspect, fabricate, replace and install ceramic lined PF pipework, square to round, hangers and supports structures) on an “as-and-when” required basis at Kriel Power Station for a period of five (5) years

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1 Description of the service

Executive overview Introduction

Pulverized Fuel pipe work is meant for conveyance of pulverized fuel and primary air mixture from the mill to the burners. In any one mill at Kriel Power Station one pipe comes out of the mill to the distribution box which splits the pipe into six pipes through to the burners. There are 6 mills in any unit at Kriel Power Station and 36 burners per unit which means there is a total of 36 pipelines from the distribution box to the burners. The PF conveyed has some abrasive characteristics causing erosion in the PF pipes especially on the bends and kinks.

PF Pipe work project is driven by SHE (Safety; Health and Environmental) and production efficiency concerns. Safety of the system is an important consideration when considering replacement of individual pipe supports or re-calibration of the entire support system. There is currently a significant number of pulverized fuel leaks from the PF pipe work. PF leaks at the station are a frequent occurrence and this result in mill shutdowns and load losses are incurred due to mill unavailability if the standby mill is not available. Furthermore, PF leaks result in accumulation of PF outside boiler causing risk of fire and health hazards.

The PF pipes hanger's replacement, repair, re-calibration is driven by deterioration of Kriel Power Station. There is lack of evidence that the hangers were replaced or re-calibrated especially when PF pipes lining. There is a quite a number of broken, missing, bent, corroded PF pipes hangers at Kriel Power Station.

The lack of data on which PF pipes were lined or PF pipes hangers replaced dictates that the scope of work focuses thorough inspections of the PF pipework and Hangers in order to identify PF pipes and Hangers that can still last for extended period without compromising the targeted period of >9 years without PF leaks in the plant and desirable maintenance free on this period. This section defines the scope the contractor will execute and the requirements it must comply to.

Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

Normative

ISO 9001 Quality Management Systems

QM 58 Quality Standards or Procedures

240-43156827 Introduction to the Welding Rulebook

36-505 Personnel and Entities Performing Welding Related Special Processes on Eskom Plant

36-775 Control of Plant Construction Repair and Maintenance Welding Activities

240-83539994 Eskom Personnel Approval (NPA) for Quality Related Special Processes Standard

Informative

28.45/538 PF distribution box primary riffle plates

F3G29792 Unit 1 – 6 PF Burner detail design drawing

F3E29794 Unit 1 – 6 PF Pipe section

F3E29795c Unit 1 – 6 PF burner core air pipe detail drawing

Definitions

PF Piping: Pulverized Fuel pipe work is meant for conveyance of pulverized fuel and primary air mixture from the mill to the burners.

Contractor: A group of people and facilities (corporation, firm, enterprise, institution etc.) with an arrangement of responsibilities, authorities, and relationships. It also refers to supplier, consultant, and service provider.

Approved Inspection Authority: An organization or person approved by the Chief Inspector, South African Department of Labour, in terms of the Occupational Health and Safety Act 85 of 1993 and appointed by Eskom

Quality Control Plan (QCP): A document specifying the activities to be inspected throughout the execution of the project, inclusive of test methods, procedures, and acceptance criteria. (This term is equivalent to QIP and ITP)

Contract Manager: This term refers to a person responsible for fulfilling the role concerned with the contractual aspect of the Eskom Commercial relationship with the Contractors in respect of the specific contract

Data Package: All documentation and certification required to be issued by the Contractor in order that the takeover can be certified by Eskom

Abbreviations

Abbreviation	Explanation
AIA	Approved Inspection Authority
DB	Distribution box
GO	General overhaul
VJ Couplings	Viking Johnson Couplings
ITP	Inspection and test plan
MGO	Mini general overhaul
NDT	Non-destructive test
NEC	New Engineering contract
PF	Pulverised fuel
QCP	Quality control plan
ISO	International Organization for Standard
WPS	Welding procedure specification
P&ID	Piping and Instrumentation diagram
SANAS	South African National Accreditation Standard
MPa	Mga Pascal
Kg	Kilogram

Scope of work

The scope of this document is to provide requirements for the Inspections, repairs, fabrications/manufacture, supply and installations of ceramic lined pulverized fuel pipework, pf pipework hangers, pf pipework support and re-calibration of the new or part of the existing support system and alignment of the PF pipes, PF pipes hangers and PF pipes supports

The scope also includes inspections, testing, supply, and installation of extra components on PF pipes, PF pipes hangers, PF pipes supports. The extra components include but not limited to gaskets, Viking Johnson flange adaptors, couplings such as VJ couplings, compression bolts, bolts and nuts, hanger rods, washers, PF pipework clamps, lugs, support plates, flange gaskets, rope gaskets etc.

The scope is in general the refurbishment of the entire PF pipework, PF pipework hangers and PF pipework support systems such as clamps, hanger rods, spring support cans and all other accessories

The scope of work entailed the removal of identified eroded/damaged PF pipe work components downstream of the secondary distribution box, manufacturing, supply, delivery, and installation of the new and ceramic tiled components in the PF pipe work system(s).

The scope includes the generation of general and manufacturing/design drawings as per PF pipes and hanger components, the complete drawing package including detailed manufacturing drawings on CAD program.

	Quantity		
	Total per unit	MGO	GO
Working days		45	60
PF Piping Hangers and supports	200	45	60
PF Piping bends	36	45	60
PF Piping straight sections	36	12	24
PF Piping Lining	36	36	36
PF Piping core air tips			
PF Piping riffle insert	6	0	6
PF Piping square to round	6	0	6
PF Piping core air tips	6	0	6

Table 1: Outage scope summary

1.1 Employer's requirements for the service

The scope of the contract covers mechanical fabrication and repairs on the boiler auxiliaries, in particular the PF distribution boxes, PF burners, fuel oil pipe work and primary air dampers.

The scope of the contract covers mechanical fabrication and repairs on the boiler auxiliaries, in particular the PF distribution boxes, PF burners, fuel oil pipe work and primary air dampers.

The works has to maintain the condition of every component throughout the maintenance intervals. The work load is divided between outages, namely GO and MGO. The working days during a GO are 50 days and 25 days for a MGO.

1.2 PF DISTRIBUTION BOX

- Description of works on PF distribution boxes
 - Open the two inspection doors on the distribution box
 - Inspect the primary distribution box riffles, take wall thickness of the high wear areas and visually inspect the casing.
 - Inspect the secondary distribution inlet plates. Take wall thickness readings and visuals.
 - Visually inspect the primary and secondary distribution boxes for temporary repairs and report.
 - Inspect the condition, movement and sealing of the PF distribution box damper.
- Repairs on secondary distribution box
 - Cut out temporary repairs and repairs using a window patch
 - Cut out the bottom 80 mm of the distribution plates
 - Weld in 80 mm flat bar in place of the removed distribution plates
- Repairs on the primary distribution box
 - Repack all damper glands
 - Repair worn areas on the damper
 - Repair door studs & bolts. NOTE: door bolts to be stud-mounted
 - Repair eroded / distorted damper doors, sealing strips and casing
 - Open and close PF isolating damper to ensure free movement inside and free operation of the damper links. (2 per box)
 - Cut out damaged primary rifle plates (on complete box)
 - Install new primary rifle plates to replace damaged ones (on complete box)
 - Close inspection doors only after the PF isolating dampers has been stroke checked in the presence of Eskom

1.3 PF BURNERS

- Description of works on PF burners

Major repairs* of the PF burners in table 1 include –

- Removing the burner from the burner mouth
- Repair/replacement of the cone
- Repairs on the liners
- Repairs on the square to round and burner casing
- Replacing the small rifle box
- Repairs/replacement of the 30 mm rear, 10 mm intermediate and 10 mm stainless steel tip.

The final scope will be determined after inspections and only specific actions will be given to rectify defects, however the scope may consists of all of the above actions.

Minor repairs** in table 1 -

- Refers to repairs done on components that can be removed from the burner without taking out the whole burner.
- This includes the core air pipe, core air sleeve, liner replacements and patching from the outside.

- Inspections

Inspections must be done from inside the boiler, via ski-jacks or an internal scaffold. The condition of the PF rear and core air sleeve must be measured from outside, with access from the half-moon inspection cover.

CONTRACT TITLE: Supply, Inspect, fabricate, replace and install ceramic lined PF pipework, square to round, hangers and supports structures) on an “as-and-when” required basis at Kriel Power Station for a period of five (5) years

- Open the burner liner inspection cover to have visual access to the Burner Liners.
- Open the burner swirl inspection doors and inspect the swirl vanes.
- Open the square to round inspection cover and inspect the riffle plates of the small riffle box
- Do a visual inspection on the square to round section of the burner for wear.
- Do a visual inspection on the PF liners inside the burner casing
- Inspect the burner internals and report on each component. Report the thickness of the components, with readings on and around worn areas.
- Do a visual inspection on the riffle plates inside the square to round area
- Do visual inspection and thickness test of the core-air damper
- Inspect core air damper internals and the adjustment arms
- Special attention must be given to PF erosion patterns. The following items to be visually inspected for erosion, damage and wear:
 - Centralizing plates
 - Centralizing pins
 - Burner front tip
 - Extension ring on the cone
 - Square tubing in burner mouth
 - Core air pipe tip
 - PF pipe/ core air sleeve (internally)
 - Burner refractory

Repairs/Overhaul of burners

- Where the thicknesses of the PF rear or intermediate sections are below 50% of original thickness cut out and repair using a window patch. Where 2/3 of the pipe is thin the whole pipe section should be replaced.
 - Replace worn or distorted stainless steel tip
 - Replace worn PF liners in the burner inlet casing
 - Repair worn sections on the burner inlet casing
 - Replace small riffle box
 - Replace square to round section on the burner inlet
 - Build up worn square to round
 - Repair worn core air pipe
 - Build up core air/PF sleeve – Replace if badly worn
 - Repair core air damper and adjustment mechanism-ensure free movement of mechanism
 - Replace distorted or cracked burner mouth cone
 - Install/repair extension ring on the cone
 - Replace worn or missing centralizing plates in the stainless steel tip
 - Replace worn or missing centralizing pins in the cone
 - Repair the air swirl. Replace the swirl when it is damaged by excessive heat
 - Setting up the swirl air to the correct position. Performance and testing will give the setting and be present for verification
 - Hard facing of material

Note: All Sicro 23/20 material have been replaced by 310 stainless steel.

1.4 DAMPERS

Description of works on the primary air dampers

The primary air damper's operation will be checked when the unit comes down. The contractor must be present to be familiar with the defect list. There is a hot air, cold air and quick close damper on each mill, a total of 18 dampers. The following actions will be actioned during outages:

- Open the inspection door. The inner door must be repaired and the lagging replaced
- Visual inspection of the damper, shaft and seal
- Stuffing box repairs
- Remove old packing and repack the stuffing box with new packing

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- Damper shaft replacement
- Damper seal repairs – 6 mm plate on circumference
- Stroke the damper and adjust the actuator link
- Replace the damper bearing
- Replace the door seals

Description of works on the fuel oil pipes

- Inspect the fuel oil lines for damage. An inspection at the start and end of the outage is required. The defects identified at the start must be repaired and damaged incurred during the work on the PF burners must be fixed.
- Repair the fuel oil stand pipes
- Repair the stand pipe support
- Replace damaged or bent sections in the fuel oil line
- Replace the fuel oil isolating valves

1.5 DRAWINGS ISSUED BY THE EMPLOYER

- [18] 0.45/24597 PF distribution box GA drawing
- [19] 0.45/2129 Unit 1 – 3 PF burner detail drawing
- [20] 0.45/54962 Unit 4 – 6 PF burner cone detail drawing
- [21] 28.45/538 PF distribution box primary riffle plates
- [22] F3G31663 Unit 4 – 6 PF burner design drawing
- [23] F3G29792 Unit 1 – 3 PF burner detail design drawing
- [24] F3E29794 Unit 1 – 3 PF burner casing and PF pipe section
- [25] F3E29795c Unit 1 – 3 PF burner core air pipe detail drawing
- [26] F3E29796 Unit 1 – 3 PF burner air swirler detail drawing
- [27] F3E29797 Unit 1 – 3 PF burner air swirler arm detail drawing

2. General

An Inspection report must be submitted (per item; burner, damper ect.) to the Service Manager. The inspection and proposal report along with the schedule must be submitted to the Service Manager for approval. The recommendations on the report have to be approved by the Burner System Engineer. The approved inspection and proposal report will be the work instruction used for pricing.

At the completion of the job a full data pack must be handed over to BPE (Boiler Plant Engineering) with full inspections and NDT reports. The file must have a check sheet with all the required documents listed. The check list has to be completed and signed before the COC will be signed. The calibration certificates of the instruments used to do NDTs must be in the data pack.

The contractor submits the QCP two weeks before the outage for the scope of work. The QCP has to be approved by the system engineer before the works starts. The QCP must adhere to the requirements in QM-58.

The inspections and NDT's must be done in accordance with the following Eskom standards:

- 240-83540088 Requirements for Non-Destructive Testing (NDT) on Eskom Plant
- 240-83539994 Eskom NDT Personnel Approval (NPA) for Quality Related Special Processes on Eskom Plant

All welding on the PF burners must be according to the following Eskom standards:

- 240-43156827 Introduction to the welding rulebook
- 36-775 Control of plant construction, repair and maintenance welding activities
- 36-505 Personnel and entities performing welding related special processes on Eskom plant

The PF burners are classified as level 1 plant. All welding data packs and procedures must be in line with the above standards.

The welding documents required, as per 36-775, must be approved by the IAI before any welding starts.

All work carried out will be in line with the applicable ESKOM standards. Where nothing exists, good engineering practise will be followed. This includes but is not limited to the covering of all openings and the use of approved chemicals.

The above activities are the minimum activities expected to be carried out by the Contractor, the final scope can only be done after inspections. There are other activities that will be done that are dependent on the inspection and repair proposal approved by the System Engineer. All activities must be confirmed with the Service Manager for time and cost before the work may commence.

No item of plant should leave site for refurbishment without the knowledge of the Service Manager.

Additional information on activities required to carry out Work:

- All rigging must be done by the contractor.
- All thickness tests to be done with D-meter.
- Erosion patterns to be welded up before grinding commences.
- The repairs does not include overlay patches, the only method accepted is window patching.
- All joining welds must be full penetration welds.
- With the smooth grinding on sections, the alignment on patching must be within a range of ± 1 mm.
- Hot-boxes for welding electrodes are mandatory.
- The contractor must be on site during the light up to repair PF leaks.

Service Information

Task orders will be issued by the *Service Manager* on an "as and when" required basis. The liability of the *Employer* is limited to the total of the Prices stated in the specific Task Order and not the total Price stated in the Service Information. The *Employer* is not obliged to issue any Task Order to the *Contractor* despite the *Contractor* being awarded the contract.

The *Contractor* will be notified by the *Service Manager* a minimum a month in advance if he becomes aware of any Outage dates that is delayed with 2months or brought forward.

Emergency Task Orders may be given at any time by the *Service Manager* and different conditions needs to be adhered to as per 2.13 Management of work done by Task Order

Include any constraints about scaffolding, rigs, heavy lifts and cranes, including removal from the Affected Property.

- No equipment, lifted and/or the lifting machinery themselves may be left un-attended or stored underneath the voltage lines or at the HV yard.
- No un-qualified/Certified person should carry out the rigging works without the supervision of the qualified and authorised person.
- All lifting equipment (Slings, U-bolts, shackles etc.) should be within working validity and certification

Contractor to adhere to the following documentation within the Service Information:

- ORHVS – Regulations – EPC – 32-846
- 36-681 Rev01 – Plant Safety Regulations
- RLR0037 – Management and control of the Declared Outage Permit
- Driven Machinery Regulations 1988
- Project Controls Requirements – 240-85065548

Electrical Installation Regulations to be adhered to, all electrical boards must be inspected and tested before connecting to a power supply and then a CoC must be issued

1.2 Interpretation and terminology

The following abbreviations are used in this Service Information:

Abbreviation	Meaning given to the abbreviation
OBL	Outside battery limits

2 Management strategy and start up.

2.1 The Contractor's plan for the service

The Contractor will submit a plan to the Service Manager for acceptance within the period stated in the service agreement.

Requirements which are to be incorporated into the Contractor's plan:

- Document 240-85065548 requirements (project controls for contractors)
- Level 4 programme when Task Order is provided to the Contractor

2.2 Management meetings

Regular meetings of a general nature may be convened and chaired by the Supply Manager as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk register and compensation events	Discussions to take place as soon as a risk is notified	Service Manager's office	Contractor, Service Manager, Co-ordinator and Contracts Supervisor
Overall contract progress and feedback	Weekly basis during Outages Thursdays 14:00-15:00	Service Manager's office	Service Manager, Contractor, Co-ordinator and Contracts supervisor
Daily Outage Progress	Daily 10:00am during outages	Outage Boardroom	Outage Execution Manager, Planner, Service Manager, Co-ordinator and Contract Supervisors
Daily Safety Toolbox Talks	Daily before work starts on site with signed attendance registers by Contractor's employees and signed off minutes by the Contractor's Site Manager	Contractors Yard	Contractor and his employees
Contractor Weekly Safety Meeting	Wednesdays during Outages 11:00-12:00	Outage Boardroom	Safety Officers, Supervisors, Outage planners and Co-ordinators
Plant Safety Walk down	Tuesdays 08:00am and Thursdays 08:00am during Outages	Outside the unit on Outage shutter door	Safety Officers, Supervisors, Outage planners and Co-ordinators

Contractors Meeting	Daily 15:00pm during outages	Service office	Manager's	Outage Co-ordinator, Contractor, Contractor Planner and Supervisor
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If the *Contractor* can't attend any meeting his feedback should be formally communicated through to the *Service Manager*.

The *Contractor* will provide a detailed feedback report on a daily basis during Outages providing accurate feedback on the status of service carried out by the *Contractor*. This report should indicate accurate progress of service and if any constraints are experienced, the *Contractor* to communicate with the *Service Manager* and mitigate the risks with action plans.

Meetings of a specialist nature may be convened as specified elsewhere in this Service Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the service. Records of these meetings shall be submitted to the *Service Manager* by the person convening the meeting within five days of the meeting.

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

2.3 Contractor's management, supervision and key people

The *Contractor* to provide a key list of personnel who will carry out the work on site with their qualifications attached. A company organogram will be needed by the *Service Manager* to communicate accordingly to comply with the NEC3 Term Services Contract communication structures. *Contractor* to refer to Kriel Power Station *Contractor* SHE Requirements RSR0001

2.4 Plant Safety Regulations Permits

It is the sole responsibility of the *Contractor* to ensure at all times there is an authorised Responsible Person to take out permits for the execution of the service. The *Employer* will provide all training necessary for the selected *Contractor's* personnel to be authorised on Eskom Plant Safety Regulation.

2.5 Provision of bonds and guarantees

Not Applicable

2.6 Documentation control

Documentation requirements covers the life cycle of the project from the initial engineering stages through to installation and commissioning including operating, maintenance and the training stages of the project. Not only must these documents be comprehensive and complete but comply with strict document control and revision procedures.

The *Contractor* is responsible to plan the supply of the documentation during the various project stages and to provide the documentation in accordance with the *Contractor* Document Submission Schedule (CDSS). A document is thus any written or pictorial information describing, defining, specifying or certifying activities, requirements, procedures or results.

All the drawings issued by the *Employer* for this contract is copyright protected and are not to be copied by the *Contractor*.

It is the responsibility of the *Contractor* to update any drawings that may have changed due to modifications on the plant. These drawings should be submitted and registered correctly by the *Contractor* to the drawing office at Kriel Power Station.

The *Contractor* submits all documentation on a formal transmittal form to the *Service Manager*.

All manuals, documents, drawings and engineering documentation shall be presented in British English in both software and hardware.

All Communications will be filed and kept on site at all times as it is crucial to have the correct communication structures. These communication documents should at all times adhere to the NEC 3 Term Service Contract communication requirements.

Contractor Document Submission Schedule (CDSS)

Document Name/Description	Date/Time documents to be submitted
A programme in Primavera format as referred to document number (240-85065548)	One week after receipt of task order
Baseline risk assessment	A month before start of the work
QCP's	A month before start of the work
<i>Contractor's</i> Safety file	Two week before start of work
Inspection report	24 hours after stripping activity
Daily progress report	After Every Shift
Technical report and data pack	Within 14 days of completion of the services

2.7 Invoicing and payment

Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice showing the amount due for payment equal to that stated in the *Service Manager's* payment certificate.

The *Contractor* shall address the tax invoice to:

Eskom Holdings SOC Ltd
Reg. No. 2002/015527/30
Accounts Payable
Email to: Invoiceseskocomlocal@eskom.co.za

The *Contractor* keeps records of all invoices submitted and paid up to the end of the project, as well as details of Actual Costs.

All invoices are hand delivered to the Kriel Finance Department (Account payables) and include on each invoice the following information:

Name and address of the *Contractor* and the *Service Manager*;
The contract number and title;
Contractor's VAT registration number;
The *Employer's* VAT registration number 4740101508;
Description of service provided for each item invoiced based on the Price List;
Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT

Contractor is required to follow the correct process to ensure the payment is effected in accordance with contractual payment terms.

ESKOM HOLDINGS SOC LTD

CONTRACT NUMBER:

CONTRACT TITLE: Supply, Inspect, fabricate, replace and install ceramic lined PF pipework, square to round, hangers and supports structures) on an “as-and-when” required basis at Kriel Power Station for a period of five (5) years

Contractor is required to follow the correct process to ensure payment is effected in accordance with contractual payment terms:

2.6.1 Service related invoices

- a) Once the service have been delivered/completed both parties have to agree that the service has been delivered/completed successfully prior to invoicing
- b) An assessment payment certificate must be completed between the *Contractor* and *Service Manager* according to the service performed. Both parties have to sign the assessment/certificate
- c) A copy of assessment/payment certificate must be obtained by the *Contractor* to enable the creation of an invoice and to prevent any discrepancies. A copy of the assessment/payment certificate must be attached to the original invoice
- d) *Service Manager* performs a service entry and Goods Receipt on the SAP system. (Assessment/Payment Certificate issued as a source document for Service Entry Goods Receipt)
- e) *Service Manager* will forward the Service entry and Goods Receipt Note number to the *Contractor* within 3 working days after the service has been rendered and the Assessment/Payment certificate signed
- f) *Contractor* must forward the original invoices together with a copy of the Assessment/Payment certificate to the Eskom Documentation Centre.

2.6.2 Goods Delivered Invoices

- a) Once the Goods are delivered, the *Service Manager* performs a Goods Receipt on the SAP system. (The delivery note is used as source document for Goods Receipt. The invoice should not be used as a delivery note)
- b) *Service Manager* will then forward the Goods Receipt note to the Vendor immediately or within 3 working days after the Goods are delivered.
- c) Vendors must then forward the Invoices together with a copy of the Assessment/Payment certificate to the Eskom Documentation Centre

2.6.3 Invoices linked to commodity prices

- a) The requirements are the same as for Goods Delivered Invoices.
- b) Invoices which are linked to commodity prices will result in CPA (Contract Price Adjustment).
- c) Attach a copy of the material invoice that has been previously paid to the CPA invoice, as well as the calculation sheet and all indices attached other than SEIFSA.
- d) The relevant Eskom Department will then complete the CPA calculation sheet and forwards it to the Eskom Documentation Centre.

2.6.4 Retention Invoices

- a) The requirements are the same as for Goods Delivered and service related Invoices.
- b) Where Retention is applicable on the contract, the Eskom SAP system will automatically create the Retention, and the amount deducted from the invoiced amount.
- c) Invoices related to retentions release require a defect or completion certificate and a retention release certificate from the *Service Manager* and must be attached to the original invoice. The original invoice for the retention to be released must be accompanied by the approved and signed completion/defect certificate and retention release certificate and forwarded by the *Service Manager* to the Documentation Centre to effect payment.

2.6.5 Foreign exchange Invoices

- a) The requirements are the same as for Goods Delivered and service related Invoices.
- b) The following has to be attached to the Invoice before it will be processed: Commercial invoice. Bill of entry (SAD500), SARS release notification, Customs worksheet, Bill of Lading or Airway Bill and approved Exchange Control Approval (EXCON).

2.6.6 General Information related to Eskom Invoices

- a) *Contractor* must ensure that the Service Entry and Goods Receipt Note number appears on the invoice. (It can be printed or hand written on the invoice).
- b) Eskom Purchase Order number must appear on invoice.
- c) Invoices must be VAT compliant in line with the VAT Act requirements.
- d) Invoices submitted must reflect the bank account details. A once off copy of the banking details may be forwarded to the Documentation Centre and it will be attached to each scanned invoice.
- e) Invoices must be original or certified as an original in line with the VAT Act. No electronic invoices will be accepted.
- f) Eskom's correct name "**Eskom Holdings SOC Limited**" must appear on the invoice.
- g) The Eskom VAT registration number: **4740 101 508** must appear on the invoice.
- h) No pro-forma invoices will be accepted.
- i) *Contractor* cannot be utilized by Eskom for more than 3 times without a contract being established.

Note:

1. Invoices must be delivered to the Eskom Documentation Centre, as this will speed up the payment process and ensure that invoices are not lost and payments delayed. There is no need for *Service Manager* to sign invoices as they perform Goods Receipt in the system. The assessment certificate and Goods Receipt serves as the approval of payment.
2. Eskom Documentation Centre will review invoices according to a checklist and on completion scan the documentation into Accounts Payable processing system (Documentation can only be scanned where the Purchase order no. and Goods Receipt Note no. is reflected on the invoice, and the invoice complies with the VAT Act).
- 3.

Invoices are processed and released for payment by Accounts Payable Section only where the source documentation is 100% correct)

2.8 Contract change management

Any change of the *Contractor*'s company ownership should be communicated through to the *Service Manager*. Failing to do this may lead to contract termination with legal consequences.

The correct processes and procedures will be communicated through to the *Contractor* by the *Service Manager*.

If the *Employer's Service Manager* change the *Contractor* will be notified by the *Employer* as soon as possible to ensure that the *Contractor* follow the correct communication channels.

2.9 Records of Defined Cost to be kept by the Contractor

In order to substantiate the Defined Cost of Compensation Events, the *Employer* may require the *Contractor* to keep records of amounts paid by him for people employed by the *Contractor*, Plant and Materials, work subcontracted by the *Contractor* and Equipment.

The *Contractor's Site Manager* will complete the site daily log and this will be submitted to the *Service Manager* for his signature before 12 am of the following morning barring weekends. The Friday and weekend logs will be submitted before 12 am Mondays. The log will include but not be limited to the following:

- Date and day.
- Weather.
- Site Conditions.
- Work Done.
- People who are employed by the *Contractor*
- Work sub-contracted by the *Contractor*

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- Any incidents during that period.

Any communication and documentation during this service agreement to be filed in the contract file. This file is in the possession of the *Service Manager* at all times.

2.10 Insurance provided by the *Employer*

As stated in Contract Data and as per Annexure A within this Service Agreement.

2.11 Training workshops and technology transfer

The *Service Manager* may request a detailed workshop or bar charts which fit into the logic and time span of the Accepted Programme, and reflects the required manufacturing completion dates.

The *Contractor* should create a programme for training on the plant for the *Employer*’s nominated employees if required from the *Service Manager*.

This training should be relevant for the *Employer*’s employees to perform front line fault finding or maintenance.

2.12 Design and supply of Equipment

Details of the design of Equipment is shared with the *Service Manager*, not necessarily for his acceptance but, as an assurance that the Equipment will be able to allow the *Contractor* to Provide the Service efficiently and without delay.

Also the *Employer* may wish to exercise constraints or include witness and hold points during manufacture, assembly or delivery of such Equipment.

The *Contractor* submits particulars of the design of an item of equipment to the *Service Manager* for acceptance when the *Service Manager* instructs him to. A reason for not accepting is that the design of the item will not allow the *Contractor* to provide the service in accordance with the Service Information, accepted plan or the applicable law.

2.13 Things provided at the end of the service period for the *Employer*’s use

2.13.1 Equipment

The *Contractor* is to hand over a serviceable plant to the *Employer* by the end of this contract.

2.13.2 Information and other things

The *Contractor* has the right to use Equipment, Plant, and Materials as stated in this Service Information provided by the *Employer* to provide the service.

At the end of the service period the *Contractor* returns all Equipment and surplus materials to the *Employer*. Provides items of equipment for the *Employer*’s use as stated in the Service Information and provides information and other things as stated in the Service Information.

2.14 Management of work done by Task Order

A Task is work within the service which the *Service Manager* may instruct the *Contractor* to carry out within a stated period of time.

A signed Task Order is the *Service Manager's* instruction to carry out a Task.

Task Completion is when the *Contractor* has done all the work in the Task and corrected Defects which would have prevented the *Employer* or Others from using the Affected Property and Others from doing their work.

Task Completion Date is the date for completion stated in the Task Order unless later changed in accordance with this contract.

A Task Order includes:

- A detailed description of the work in the Task
- A priced list of items of work in the Task in which items taken from the Price List are identified.
- The starting and completion dates for the Task
- Conditions of the *service agreement* is in accordance with the Task Order issued

The *Service Manager* consults the *Contractor* about the contents of a Task Order before he issues it.

The Prices for items in the Task price list which are not taken from the Price List are assessed in the same way as compensation events.

No Task Order is issued after the end of the service period.

Work will not commence on site without the *Contractor* receiving a signed detailed task order that has been agreed upon by the *Service Manager* and the *Contractor*.

It is the *Contractors* responsibility to provide the *Service Manager* a detailed Task Order programme for acceptance within the period stated in the Contract Data.

Only when the Task Order programme is accepted and agreed upon by the *Service Manager* and the *Contractor* will any work commence on site.

When any emergencies do arise, it is required from the *Contractor* to adhere to the following terms:

- The *Contractor* will be informed of emergencies when the *Service Manager* first becomes aware of it.
- Response time within 2 hours for any communication when the *Contractor* acknowledges the emergency.
- Provide a programme within 8 hours after Task Order provided to the *Contractor*
- Mobilise within 5 hours after Task Order have been accepted by both parties.

3 Health and safety, the environment and quality assurance

3.1 Health and safety risk management

The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the service. Without limitation the *Contractor*:

accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2003 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Affected Property;

warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of the service; and

undertakes, in and about the execution of the service, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor*'s direction and control, likewise observe and comply with the foregoing.

The *Contractor*, in and about the execution of the service, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor*'s direction and control, likewise observe and comply with the foregoing.

3.2 Environmental constraints and management

All service providers appointed to render any services within Eskom Kriel Power Station are required to comply with the station's Environmental Management System requirements.

NB: Before commencing with any work, the service providers are required to visit the station's environmental section for evaluation. The station's environmental practitioner will evaluate the services to be rendered by the service provider and therefore allocate relevant legal and other requirements documents which the *Contractor* shall comply with during the works.

The service provider shall then commence with the works but paying inordinate attention towards implementing the relevant legal and other requirements measures as agreed in the register. Failure to comply with this agreement may ultimately lead to the termination of this contract. This requirement shall also be clearly stipulated in the NEC contracts between Eskom Kriel Power Station and any service providers.

It should always be noted that Kriel Power Station is ISO14001 certified and therefore promotes Integrated Environmental Management (IEM) philosophy which aims to achieve a desirable balance between conservation and development. All activities taking place within Kriel Power Station must consider section 28 of the National Environmental Management Act (107 of 1998) which makes provision for the duty of care approach. The contractor's team must commit to review and to continually improve environmental management, with the objective of improving overall environmental performance. The *Contractor* must consult with Kriel Environmental section on a regular basis for on-going assistance and advices.

The EMS shall clearly cover the following areas as per ISO 14001;

- Environmental policy
- Environmental legal and other requirements
- Risk Assessments/Aspects & Impacts Register
- Improved management of monitoring and measurement documentation(e.g. devices calibration certificates)
- Provision of necessary resources (e.g. computers, adequate human resource) and allocation of roles and responsibility (through clear appointments) to achieve effective implementation of the EMS.

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- Continuous commitment towards complying with operational controls such as work instructions, operational procedures, etc. (either provided by the *Contractor* or by *Service Manager*) as well as emergency preparedness and response procedures/plans.
- The contractor shall continually evaluate the compliance to legal requirements (e.g. sewage treatment plant permits and other applicable legislation); this should also be documented within the monthly environmental site inspections reports.
- Kriel Power Station’s procedure for non-conformity, corrective action and preventive actions shall be followed in case of the environmental incidents.
- Contingency plans.

Environmental Management Programmes

- Environmental Management Programmes shall be established and maintained to ensure that objectives and targets are achieved.

Audits

Audits covering various Environmental aspects, Safety, Operational, IBI and Maintenance Management at the plant shall be carried out within an acceptable interval to ensure compliance with statutory requirements and Eskom’s policies, Directives, procedures etc.

3.3 Quality assurance requirements

The *Contractor* shall be required to demonstrate by means of a Contract Quality Plan (CQP) that this organisation is so structured that all the requirements of the specification will be properly monitored and controlled. The Contract Quality Plan (CQP), which must include the Quality Control Plan (QCP), is to be drafted in accordance with QM-58 and the Supplier Contract Quality Requirement Specification (QM58). The Quality documents are to be submitted for approval to *the Project Manager* within thirty (30) days after a contract has been awarded to the *Contractor*.

No work may commence unless the Contract Quality Plan and Quality Control Plan documents have been approved in writing and a copy submitted to *the Project Manager*. The *Contractor*, in conjunction with *the Project Manager* must sign off all Quality Control documents after completing all work as per the agreed scope. The *Contractor* to submit a copy of the final signed off documents/data packages to *the Project Manager* within one (1) week after completion of work.

The *Contractor* shall be required to read and fully understand the contents of the Supplier Contract Quality Requirement Specification (QM58) and a copy is to be kept in possession or on premises.

The *Contractor* shall comply with all *Employer’s* requirements as set out in QM-58 (Supplier Contract Quality Specification). .

The *Contractor* further ensures that the subcontractor’s programmes comply with the requirements of the Service Information.

The *Contractor* notifies the *Service Manager* of any changes to the Quality System and obtains agreement prior to implementation on existing orders and contracts, or sub orders and sub contracts.

The Supplier Contract Quality Requirement Specification (QM58) shall remain applicable in the event of the contract being extended or modified for reasons permitted.

By signature and acceptance of this contract the *Contractor* acknowledges and agrees to comply with and adhere to Eskom’s policies and procedures (current and/or latest revisions) including the Supplier Contract Quality Requirement Specification (QM58).

3.3.1 Contract Quality Management Plan Requirement

The *Contractor* prepares a contract quality management plan that, where appropriate, indicates the following:

- Indicates the interface with the *Contractors* quality system and applicable documents such as procedures and work instructions
- Establishes communication channels between the *Contractor* and the *Service Manager* in respect of quality and the integration of such with the prescribed contract communication channels
- Indicates how specific subcontractors will be monitored
- Identifies items or activities for which quality control plans will be prepared
- Identifies the specifications, drawings and acceptance criteria for material for which quality control plans are not required
- Identifies the areas or processes requiring special controls
- Identifies the *Contractor's* Management Representative and personnel responsible for the control of quality activities and their relationship to the *Contractor's* management structure
- Identifies the documents which are to be submitted to the *Service Manager*
- Indicates the *Contractor's* quality monitoring programme

The *Contractor* periodically updates the contract quality management plan to reflect changes in any of the above details. The frequency of such updates is determined by the *Service Manager* but will not be greater than one year.

3.3.2 Quality Control Plan

The *Contractor's* or Subcontractor's quality control plans cover inspection and test proposals for items or activities to be supplied as part of the service.

The quality control plan indicates the following as appropriate:

- The identification of the item.
- A list of the sequence of operations including inspections and tests.
- The identification of the specification, drawings or procedures for each operation.
- The acceptance criteria with reference to the appropriate technical specification, in-house, national or international standard and relevant clause number.
- The inspections and tests the *Contractor* has nominated for hold and witness points.
- Provision for inspections and tests nominated by the *Service Manager*.
- Provision for inspection status indication.
- Inspection and test records which are generated by the *Contractor*.
- Competence of the people-Level II welding inspector, Coded welders, N3 Fitters /Boiler makers
- Personnel qualifications from approved training and accredited institute
- ITPs and welding procedures
- Material certificates
- Organogram indicating the quality person and his/her duties
- Adhere to the QM58
- Follow the Eskom welding rule book

The quality control plans are reviewed by the *Service Manager* to allow for insertion of his specific requirements, including hold and witness points, prior to commencement of work. The *Contractor* does not commence work until the *Service Manager* accepts.

The *Contractor* shall comply with:

- a) The Occupational Health and Safety Act, 1993, and all Regulations made there under.
- b) All *Employer* Safety and Operating Procedures, which are attached hereto.

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The *Contractor* acknowledges that he is fully aware of the requirements of all the above and undertakes to employ only people who have been duly authorised in terms thereof and who have received sufficient safety training to ensure that they can comply therewith.

The *Contractor* undertakes not to do, or not to allow anything to be done which will contravene any of the provisions of the Act, Regulations or Safety and Operating Procedures.

The *Contractor* shall appoint a person who will liaise with the *Employer* Safety Officer responsible for the premises relevant to this contract. The person so appointed shall on request:

- a) Supply the *Employer* Safety Officer with copies of minutes of all Health and Safety Committee meetings, whenever he is required to do so.
- b) Supply the *Employer* Safety Officer with copies of all appointments in respect of employees employed on this contract, in terms of the Act and Regulations and shall advise the *Employer* Safety Officer of any changes thereto.

Employer may, at any stage during the currency of this agreement be entitled to:

- a) Do safety audits at the *Contractor*’s premises, its work places and on its employees.
- b) Refuse any employees, sub-*Contractor* or agent of the *Contractor* access to its premises if such person has been found to commit any unlawful act or any unsafe working practice or is found to be not authorised or qualified in terms of the Act.
- c) Issue the *Contractor* with a work stoppage order or a compliance order should *Employer* become aware of any unsafe working procedures or conditions or any non-compliance with the Act, Regulations and Procedures by the *Contractor* or any of its Employees, sub-*Contractors* or agents. Stoppages of this nature will not constitute a compensation event.

List of minimum statutory appointments required (where applicable), as required by the OHS Act:

OHS Act, Section 16(2) - *Employer*

OHS Act, GMR 2(1) - Supervision of Machinery

OHS Act, GMR 2(7) - Assist the designated person

OHS Act, CR 6(1) – Construction Supervisor (Authorised Supervisors and Responsible Persons must be appointed as Construction Supervisor)

OHS Act, CR 6(2) – Assistant Construction Supervisor

OHS Act, Section 17 - Health and Safety Rep

OHS Act, GAR 9 – Incident investigation

OHS Act, CR 12 – Demolition work

OHS Act, CR 19 – Explosive Powered Tools

OHS Act, CR 22 – Electrical installations and machinery

OHS Act, GSR 3 – First Aiders

4 Procurement

4.1 People

4.1.1 Minimum requirements of people employed

It is the Contractor's sole responsibility to ensure all its employees have permits to perform work in the Republic of South Africa.

4.1.2 BBBEE and preferencing scheme

Where a change in the *Contractor*'s legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor*'s B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.

The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Employer* within thirty days of the notification or as otherwise instructed by the *Employer*.

Where, as a result, the *Contractor*'s B-BBEE status has decreased since the *starting date* the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor*'s obligation to provide the service.

Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination will be dealt with according to the NEC3 TSC penalty/termination clauses

4.1.3 Accelerated Shared Growth Initiative – South Africa (ASGI-SA)

N/A

4.1.4 Supplier Development and Localisation

Contractor is expected to develop skills in the form of offering bursaries or by offering in service training for new graduates in any fields of study applicable to this industry.

Skill Type	Target	Contractor's Proposal	Entry Level	Exit Level
NDT Technician	4	6	SAIW /Matric	Level 1
Bursary Sponsorship (Technical Qualification)	4	4	Matric	National Diploma

Skill development and training targets

Skill type	Targeted number of persons to be trained	Learners in training in 2 nd year	Quantity at 3 rd year
Wall thickness Technician	2	1	1
PT Technician Level 1	2	1	1
MPI Technician Level 11	2	2	
Total	6	4	2

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Training project plan

- Learners who studied NDT discipline will be afforded training opportunities with Zwane inspection.
- Zwane inspection will also offer bursary schemes for local people that want to study NDT.
- Visit local school and introduce the Engineering sector, mainly Metallurgical Engineering to young people as the career choice.

Skills transfer:

- Zwane inspection Pty Ltd would seek to transfer a range of skills which lie at the heart of the requirements of this project brief and also at the heart of the best practice Non- Destructive Testing.
- Forming strategic alliance with local youth's organization and local schools career guidance.

Job opportunities

Occupation	Total people	Job Type
Assistants	20	Part time as and when required
Cleaner	1	Full time Equivalent
Fire watcher	2	Part time as and when required
Safety officer	1	Part time as and when required
Store keeper	1	Part time as and when required
NDT- Technician	10	Part time as and when required
Total	35	

CSI

2% of the contract value.

4.2 Subcontracting

4.2.1 Preferred subcontractors

The *Employer* may list which subcontractors or suppliers the *Contractor* is required to enter into subcontracts with.

If the *Contractor* subcontracts work, he is responsible for providing the Service as if he had not subcontracted. This contract applies as if a Subcontractor's employees and equipment were the *Contractor*'s.

Sub-contractor name	Percentage	Activities	BBEE Level and CSD Number	Address
Shakwaneg Business Enterprise Pty Ltd	10%	Accommodation	Level 1- CSD MAAA0872382	117 Merlin Crescent Kriel, Mpumalanga,2271
Kwandelo Pty Ltd	20%	Transportation, Local recruitment and supply of PPE and NDT development program	Level 1- CSD MAAA0919700	13 Larkspur Avenue, Kriel, 2271

4.2.2 Subcontract documentation, and assessment of subcontract tenders

When the *Contractor* uses a Subcontractor he needs to engage with him on a NEC basis. The Subcontractor needs adhere to all processes, policies and procedures of Eskom as service should be provided as if not subcontracted to Eskom.

All reporting will happen based on the NEC standard forms or as agreed upon in the Kick off meeting.

4.2.3 Limitations on subcontracting

The *Contractor* submits the name of each proposed Subcontractor to the *Service Manager* for acceptance. A reason for not accepting the Subcontractor is that the appointment will not allow the *Contractor* to Provide the Service.

The *Contractor* does not appoint a Subcontractor until the *Service Manager* accepted them.

4.2.4 Attendance on subcontractors

The Subcontractor should attend all morning feedback Outage meetings to provide accurate feedback on the progress of service. Assessment meetings between *Service Manager* and the *Contractor* should be avoided by the Subcontractor.

4.3 Plant and Materials

4.3.1 Specifications

Plant and Materials are defined as items intended to be included in the Affected Property. This will refer to replacement of worn or defective parts, routine replacement as part of regular preventative maintenance and supply of spare parts.

4.3.2 Correction of defects

The Service Manager arranges for the *Employer* to allow the *Contractor* access if it is needed for correcting a Defect.

The *Contractor* needs to correct a Defect within one day or when the first available opportunity arises.

4.3.3 Contractor's procurement of Plant and Materials

The *Contractor* will do all procurement of materials according to own procurement processes. All materials purchased by the *Contractor* to be installed to Affected Property will be kept and preserved according to the storage relevant specification. The *Contractor* may at any point be requested by the Service Manager to submit the storage and preserving specification for any material or plant. All plant and material to be stored at an area demarcated by the Service Manager and it is the responsibility of the *Contractor* to prepare the area and make it comply with the storage and preserving specification.

4.3.4 Tests and inspections before delivery

The *Contractor* does not deliver those Plant and Materials which the Service Information states are to be tested or inspected before delivery until the Service Manager has notified the *Contractor* that they have passes the test or inspection.

All holding points on QCP should have been adhered to and signed off by both parties before accepting any material or goods on site.

4.3.5 Plant & Materials provided “free issue” by the *Employer*

The *Employer* has service air operating at 600 kPa that the *Contractor* is allowed to use. Other facilities provided by the *Employer* can be seen in Section 5.8 of this contract.

5 Working on the Affected Property

5.1 Employer's site entry and security control, permits, and site regulations

- The *Contractor* applies for temporary access permits (*Contractor's Permit*) at the Security gate, prior to the Possession Date.
- The *Contractor* personnel are required to be in possession of a *Contractor's Permit* at all times.
- All *Contractor* personnel are issued with a temporary access permit (*Contractor's Permit*) which contains the following information:
 - Name
 - ID Number
 - Company
 - Validity date
- All *Contractors'* permits are submitted to Protective Services when the workers leave the site after completion of the works.
- In order to assist Protective Services with the issuing of permits and the identification of personnel on site, the *Contractor* supplies a list of all personnel that he intends using on site, at least 24 hours prior to entry of the Security Area.
- This list is delivered to Protective Services, or is faxed to (017) 615 2602
- The list, identified with the *Contractor's* name, contains the following information:
 - Employee Name
 - Employee ID Number
 - Eskom Safety Co-ordinator signature
 - *Service Manager* signature
 - Copy of the first page of the ID book of every employee of the *Contractor*, photocopied to reduce the size to 65%.
- To speed up the process of gaining access to the site, the *Contractor* compiles detailed lists of all tools and equipment to be taken on site before arriving at the Power Station Security gate.
- A special Tool List form is available at Protective Services.
- An authorised copy of this list is retained to be used again when the tools and equipment is removed from site after the completion of the works.
- The *Contractor's* visitors and all personnel conform at all times to the security arrangements in force at the site.
- Application forms for visitors are filled in by the *Contractor's* Site Manager and approved by the *Employers* Representative, one day before the visit and submitted to the *Employer's* Protective Services office.
- Visitors are not allowed on site if the necessary forms are not in the possession of security staff.
- The Chief of Protective Services may, with valid cause, remove any of the *Contractor's* personnel from the site, either temporarily or permanently, without any prejudice. He may deny access to the site to any person whom, in the opinion of the said Chief of Protective Services, constitutes a security risk.
- No unauthorised vehicles are allowed on site.
- Only *Contractor's* vehicles with displayed Contract Vehicle Permits disks are allowed on site.
- Contract Vehicle Applications are directed to the *Employers* Representative.
- The *Contractor* is restricted to the working areas associated with his place of work.
- The *Contractor* is forbidden to enter any other areas, and must ensure that his employees abide by these regulations.
- Parking inside the power station is strictly forbidden, except for loading purposes.
- No recruiting of casual labour is done on Eskom premises, including the area outside the Power Station Security Gate.

5.1.2 Eskom Life Saving Rules:

Five Life Saving Rules have been developed that will apply to all Eskom employees, agents, consultants and contractors.

Rule 1: Open, Isolate, Test, Earth, Bond, And / Or Insulate before touch - that is any plant operating above 1 000 V.

Rule 2: Hook up at heights - no person may work at height where there is a risk of falling.

Rule 3: Buckle up – no person may drive any vehicle on Eskom business and/or on Eskom premises: unless the driver and all passengers are wearing seat belts.

Rule 4: Be sober (no person is allowed to work under the influence of drugs and alcohol.)

Rule 5: Use a permit to work – where an authorization limitation exists, no person shall work without the required permit to work.

- Kriel Power Station Health and Safety Standards
- Specifications for *Contractors* attached to the Invitation to Tender. This procedure will be handed over during tender enquiry and will enable the successful Tenderer to compile a Health & Safety plan that has to be approved by the *Employer* prior to commencement of work.
- Compliance with Eskom & Kriel No Smoking Policy
- Adhere to the OHS Act 85 of 1993
- All staff will undergo Safety Induction, presented by Kriel Risk Management Department
- *Employer's* site regulations, covering the following:
 - Clean lines
 - Storage of material
 - Safety precautions and fire prevention
 - Permits to work
 - Other *Contractor's* work
 - Representation of *sub-contractors*
 - Constant Supervision for hot work
 - Handing over of works
 - *Contractor's* Site
 - Disposal of waste, oil residue and sludge
 - Hot Work permit for welding
 - Working at heights
 - Working in and around an area that contains flammable substances
 - Testing for combustible gases
 - Availability of fire extinguishers when working in an area that contains flammable substances

5.2 People restrictions, hours of work, conduct and records

The *Contractor* provides the necessary resources to carry out the service as stated in the Service Information.

The *Contractor* provides everything to carry out the Service Information of this contract unless where otherwise stated in this Service Agreement. Everything that should be provided by the *Employer* is stated in this Service Agreement, anything not stated in the Service Agreement should be provided by the *Contractor* to execute the work as stated in the Service Information

It is very important that the *Contractor* keeps records of his people working on the Affected Property, including those of his Subcontractors. The *Service Manager* shall have access to all records of the *Contractor* and Subcontractor at any time when deemed necessary.

5.3 Health and safety facilities on the Affected Property

Any emergency equipment or fire suppression systems to be utilized by the *Contractor* when an emergency arise

Please refer to SHE Requirements for *Contractors* – Refer to RSR0001 Heading 8.1

5.4 Environmental controls, fauna & flora

General environmental requirements referred to in section 3 above, Kriel Power Station ISO14001

5.5 Cooperating with and obtaining acceptance of Others

This sub-paragraph could be used to deal with two issues.

1) The cross reference from core clause 25.1 about cooperation generally as well as details about Others with whom the *Contractor* may be required to share the Affected Property. See clause 11.2(9) for the definition of Others.

2) Requirements for liaison with and acceptance from statutory authorities or inspection agencies.

5.6 Records of *Contractor's* Equipment

The *Contractor* will at all times keep record of his equipment on site with relevant inspections carried out. Inspection reports should be accessible by the *Service Manager* at any given time when he deems necessary.

All equipment or tools signed in by the *Contractor* should strictly adhere to the gate access rules and procedures.

All Equipment including hired should be inspected and approved before accepted on site.

The *Contractor* will keep records of all hired Equipment to execute the Service Information

5.7 Equipment provided by the *Employer*

It is the responsibility of the *Contractor* to provide his Equipment list to the *Service Manager* with all calibration certificates etc.

The *Employer* provides Equipment as stated in the Service Information, anything not stated in the Service Information the *Contractor* have to provide and already accounted for in the Price List.

5.8 Site services and facilities

5.8.1 Provided by the *Employer*

The *Employer* will provide in the way of water, waste disposal, ablutions, fire protection and lighting (etc) on the Affected Property. Power will be provided by the *Employer* the *Contractor* needs to ensure his own cabling, connections, DB Boards and CoC certificates of installations and connections.

Refuse Disposal

The *Employer* provides special colour coded bins for refuse disposal. These bins are emptied by the *Employer* free of charge.

The *Contractor* ensures that all workers under his control strictly adhere to the correct use of refuse bins as stated in the Plant.

Supply of Electricity

- *Employer* will make available to the *Contractor* 220/230-volt electrical supply free of charge from the closest existing point of supply.
- The *Contractor* is to make provision for the necessary extensions and plug points.
- All Electrical boards must be inspected and tested before connecting to a power supply and then a CoC must be issued by the *Contractor*
- The *Contractor* will adhere to the Electrical Installation Regulations of 1992

Medical Facilities

- The *Contractor* provides a First Aid service to his employees and subcontractor. In the case where these prove to be inadequate, like in the event of a serious injury, the *Employer*'s Medical Centre and facilities are available.
- Outside the *Employer*'s office hours, the *Employer*'s First Aid Services are only available for serious injuries and life threatening situations.
- The *Employer* is entitled, however, to recover the costs incurred, in the use of the above *Employer*'s facilities, from the *Contractor*.

Toilet Facilities

The *Employer* provides the *Contractor* access to toilet facilities.

Temporary chemical toilets are provided by the *Contractor* where deemed necessary.

5.8.2 Provided by the *Contractor*

- The *Contractor* shall provide, for his own use adequate size offices.
- A cleaning service must also be provided.
- Domestic rubbish will be removed free of charge.
- The *Contractor* shall dismantle and clear off site all such infrastructure at the discretion of the *Service Manager* on completion of the contract.
- No such dismantling and clearance work shall be carried out without prior approval by the *Service Manager*.
- Any electrical equipment or appliances used by the *Contractor* shall conform to the applicable South African Safety standards and Kriel standard PSR 010, and shall be maintained in safe and proper working condition.
- The *Employer* shall have the right to stop the *Contractor*'s use of any electrical equipment or appliance, which in the *Employer*'s opinion does not conform to the foregoing.

- Site Location

- The boundary of the site is within the Power Station boundary fences.
- The *Contractor* is to mark the boundaries of his site clearly.
- The *Contractor* is to ensure that all his material and equipment is always within the boundaries of his site.
- A site for the *Contractor* will be provided if needed. (The exact position will be determined on site).
- The *Contractor* will ensure further treatment of the yard area to keep all neat and tidy at all times.
- The *Contractor* shall also include for such items as security, watch and access arrangements to his yard area.
- The *Contractor* shall not occupy any site area other than that located to him
- On completion of the service on Site, all areas allocated to the *Contractor* shall be re-instated to their former condition to the satisfaction of *Employer*

Contractor's site requirements

- The *Contractor* supplies, installs, properly maintains and removes all temporary construction facilities and utilities necessary for the complete performance of the service
- Including the following:
 - The *Contractor's* yard should adhere to sound housekeeping, failing with this the *Employer* may use another *Contractor* to clean up the *Contractor's* yard. These costs will be carried by the *Contractor*.
 - Any damage to installed lighting is repaired at the *Contractor's* expense.
 - The reticulation of electricity, water and any other services required by the *Contractor* from a supplied central distribution point.
 - Hazardous Substances to be contained as per Eskom requirements.
 - Transportation on and off site
 - Telephone connections may be available and the *Contractor* applies via the *Services Manager* for a connection. Connection fees and calls are for the *Contractor's* account.
 - Compressed air and gases
 - Maintenance of lay-down and storage areas
 - Electric panels and distribution wiring for erection and within *Contractor's* yard
 - Security of *Contractor's* yard
 - Temporary lighting to ensure safe working conditions.

Accommodation

The provision of accommodation for *Contractor's* personnel is the responsibility of the *Contractor*.

The *Contractor* or any of his employees or subcontractors is not allowed to use the *Employer's* dining facilities. The shop next to the main office building may be utilized by the *Contractors*.

5.9 Control of noise, dust, water and waste .

All waste introduced to and/or produced on *Employer's* Premises by the *Contractor* for this order, must be handled in accordance with the minimum requirements for the Handling and Disposal of hazardous waste in terms of Government Legislation as proclaimed by the Department of Water Affairs and Forestry 1994 Ref.: BN0621-16296-5. (A copy of this document is available at the Power Station for reference purposes).

Provide sufficient storage containers, labelled depicting general or hazardous waste and store in a designated storage area

No hazardous waste may be stored for a period of more than 90 days on the Kriel Power Station's premises
Ensure that all hazardous waste is disposed of at a licensed Class H disposal site. A copy of the hazardous waste disposal certificate must be submitted to the *Service Manager*.

Ensure that the *Contractor's* site does comply with the general good housekeeping practices. Redundant material will be removed to allocated sites. No scrap shall be stored in the *Contractor's* yard. Scrap is to be cleared from Site daily.

5.10 Hook ups to existing works

Any work performed at heights, must adhere to the correct safety standards, procedures and specifications stated in the Health and safety risk management of Kriel Power Station. Refer to RSR0001 heading 5.7

5.11 Tests and inspections

5.11.1 Description of tests and inspections

The *Contractor* gives at least 48 hours in advance notification to the Supervisor or the Authority for inspection/test and hold or witness points, which require their attendance. The *Contractor* confirms readiness for inspection at least 24 hours prior to the test.

The *Contractor* ensures that all work has been fully inspected, accepted and documented prior to requesting any inspection by the *Supervisor*.

The *Contractor* and the *Employer* provide materials, facilities and samples for tests and inspections as stated in the Service Information.

5.11.2 Materials facilities and samples for tests and inspections

The *Contractor* shall ensure that surfaces to be protected are inspected in order to evaluate extent of surface preparation for which he will be responsible. All inspection arrangements with Kriel Power Station Engineering Department will be made 24 hours in advance.

6 List of drawings

6.1 Drawings issued by the *Employer*

This is the list of drawings issued by the *Employer* at or before the Contract Date and which apply to this contract.

C4: Site Information

PART 4: SITE INFORMATION

Document reference	Title	No of pages
C4	This cover page	1
	Site Information	2
Total number of pages		3

PART 4: SITE INFORMATION

General description

The Kriel Power Station is situated approximately half way between Bethal and Ogies on the R545, being just over 30 km from each town and 10 km north-west of Kriel town.

Kriel Power Station is situated in a summer rainfall area with an average annual precipitation of about 750 mm falling almost entirely during the months of October to April. The average rainfall per month generally exceeds 40 mm during this period, although drought periods do occur which can last for 20 days or longer. Drought periods occur most frequently during the months of October/November and March/April. January is statistically the highest rainfall month with an average monthly rainfall of about 130 mm. June has the lowest rainfall with an average monthly rainfall of about 7 mm.

Approximately 85% of the annual rainfall occurs in the summer months and heavy falls of 125 to 150 mm occasionally occur in a single day. The annual average number of thunderstorms is about 75. These storms are often violent with severe lightning and strong (but short-lived) gusty winds and are sometimes accompanied by hail. This region has among the highest hail frequencies in South Africa; about 4 to 7 occurrences (depending mainly on altitude) may be expected annually.

January is normally the hottest month with an average daily maximum temperature of 27°C with a mean daily temperature in winter being about 16°C. Winter average daily temperatures vary from 18, 5°C maximum to -1°C minimum. The extreme temperatures recorded range from 34, 7°C to minus 12, 4°C for the period 1920 - 1984. (Source: Weather Bureau, Pretoria)

Winds are generally light to moderate except during thunderstorms. Generally the prevailing wind directions are from the North West during the day and from the east at night. During daytime, the prevailing winds are from the north-western direction. During night-time, the prevailing winds are from the north-eastern direction. The highest recorded average wind speed is 17, 6 km/hour. The average wind velocity over the year is 14, 5 km/hour.

(Source: Brewer & Conlin, 1996, Reference 4, page 2.5.)

Existing buildings, structures, and plant & machinery on the Site

Not applicable. The *Contractor* to specify any information required if necessary.

Subsoil information

Not applicable. The *Contractor* to specify any information required if necessary.

Hidden services

All known services will be brought to the attention of the *Contractor* by *Employers Representative*. Should the *Contractor* encounter any other services in the work area, he will immediately bring them to the attention of the *Employers Representative* who will issue instructions as to what actions are to be taken.

The protection of all pipes, gauges and plant is of extreme importance. Should any damage take place, which is due to the *Contractors* negligence, another *Contractor* will be brought onto site to affect repairs. All costs will be to the account of the *Contractor* who caused damage.

Other reports and publicly available information

The assumed 1 in 10 year rainfall figures are:

Month	Cumulative rain (mm)	No of days with rainfall > 10mm
January	200	6
February	150	6
March	120	5
April	110	4
May	40	3
June	20	2
July	30	2
August	30	2
September	60	3
October	140	6
November	160	7
December	170	6